ABSTRACT

Provided is an anode active material having a high discharge capacity and a superior capacity retention ratio during a charge-discharge cycle. The anode active material comprises an alloy material including an element M capable of being alloyed with Li and at least one kind of element R selected from elements with an atomic number of 20 or less (except for H, Li and a noble gas). As the element M, for example, Sn and at least one kind selected from the group consisting of Ni, Cu, Fe, Co, Mn, Zn, In and Ag are included. As the element R, B, C, Al, Si ,P, S or the like is included. The anode active material can have a low-crystalline or amorphous structure by the element R, thereby Li can be smoothly inserted and extracted. The content of the element R is preferably within a range from 10 wt% to 50 wt%.